
HOLISTIC WORLDVIEW: TOWARDS AN INTEGRAL UNDERSTANDING OF THE PERSONAL AND THE SCIENTIFIC

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ABSTRACT. There are two main currents that shape Western science and thus the acquisition of knowledge: the mechanistic and the holistic. These worldviews have a direct influence in the way we live our daily lives, how we perceive the world, and the way we organize our societies. History has proven that both worldviews portray numerous benefits for mankind, but recent events have showed the limits, and even the dangers, of the mechanistic worldview. By embracing a mechanistic worldview we have lost our sense of belonging with nature and the cosmos, and has produced an overall feeling of emptiness and loss of value. However, we have gained some valuable lessons through the mechanistic lens and it can be used to gain entrance to a much broader, integral, meaningful, and ethical vision, the holistic worldview. This is a necessary shift that will directly benefit science, ourselves, and the rest of nature.

KEY WORDS. Worldview, mechanistic, holistic, interconnectedness, cognition, nature, meaning, relationship, reduction, reconnection.

INTRODUCTION

Nowadays in the Western scientific milieu are several philosophical doctrines that characterize the acquisition of knowledge that informs our conduct in the different spheres of activity. These influences dictate what is accepted, incorrect and tolerable, and delineate our role in society according to a group of assumptions regarding the functioning of the cosmos. In other words, the dominant scientific vision of physical reality molds the way in which we perceive the world.

It is important to mention that conceptions of reality, both collective and personal, have changed drastically throughout time. No matter how evident and tangible the current valid description of the world may seem to us, is not more than a description that acquires its meaning in specific cultural, temporal, and geographical circumstances. Having said that, we

can very broadly distinguish two epistemological pathways, in the last hundreds of years that have shed light to human endeavors in Western societies: the mechanistic and the holistic.

MECHANISTIC AND HOLISTIC

The mechanistic worldview, being by far the most common, has the machine as guiding metaphor and proposes that we live in a fundamentally lifeless cosmos devoid of creativity and innovation. The solid components of the universe present a lineal and causal behavior, making possible the control, prediction, and manipulation of nature. Through this perspective, all is reduced in order to be understood. Everything, except humans, lacks the capacity to feel and to have a subjective experience. Consciousness is a strange and alien conception, and *Homo sapiens* are the bearers of the absolute truth, they are masters and lords of all the objects around them.

The machine world—of which we live alienated from—is formed by ordinary fragments of things or matter, named stone, cloud, building or tree, with no meaning nor value apart from the benefit they can provide us. We use stones to generate building materials or to create the structures that provide us with shelter and protection. The clouds carry the necessary water for trees to grow and provide us with the basic environmental conditions for our survival. In varying degrees, this knowledge is the organizational and structural basis of human societies nowadays.

In contrast, the holistic worldview was the predominant representation of the world in ancient times, and was not until after the scientific revolution that the mechanistic vision became the lens by which the majority of humans perceived the world. Old civilizations as the Mayans, Egyptians or Celts were capable of seeing themselves as an active part of the cosmos as a whole, and consciously shaped their lives based in natural events such as the movement of the stars or the seasons' cyclic flow.

The holistic worldview, having the organic metaphor as a guide, argues that the cosmos is a creative and dynamic entity constituted by complex beings. These fluid and adaptive entities relate in a non-linear way characterized by a perennial innovation that results in the impossibility to predict nature's outcome. There aren't 'things' or objects, but a vast interactive network of conscious and sensitive beings full of meaning and value. In words of Thomas Berry: "the Universe is a communion of subjects not a collection of objects ¹." From this point of view, wisdom emerges through an integral participatory relation between beings, based on the contextual matrix that gives birth to these interactions.

The shift from holistic to mechanistic perception brought enormous benefits to the human race in practically all aspects, especially in the

technological realm; from transportation to medicine. The efficiency and practicality of the mechanistic worldview are unquestionable.

Nevertheless, these improvements came at the enormous cost of gradually losing our connection with nature and the cosmos in general, and with a feeling of emptiness and loss so characteristic of modern humans. It's as if the inhabitants of modern and industrialized societies perceived or felt, in some indeterminate part of their being, their lost sense of belonging with nature and the cosmos.

This erosion of knowing ourselves embedded in a broader context and the consequent loss of empathy toward the human and non-human organisms stemmed from the belief that there's an abyss between the 'external' world and the 'interior' or personal world. World and people become completely distant. Thus, humanity has come to perceive itself as something separated and above the rest, since everything is merely constituted by exactly that, 'things'.

The mechanistic-reductionist perception that undoubtedly is, at least in part, responsible for the fragmentation of man and environment, and together with the technological advances that characterize it, have generated the psycho-ecological and spiritual crisis that we currently live in. It seems that we have forgotten that the rhythms of nature are the base for all human activity and when we act against them people and societies get ill, nature is exploited and entire species are threatened ².

HOLISTIC TRANSFORMATION

The time has arrived to change our attitudes, practices, and beliefs through a transformation in the way we perceive the world and acquire knowledge. We are terribly in need of finding less destructive, healthier and truly sustainable ways to relate with the world. The ancient and at the same time current holistic way of perception, informed by recent scientific advances, reveals itself as one of the most interesting and effective processes to achieve the much needed metamorphosis.

The fact that holistic perception conceives the cosmos not as an enormous machine but as an intelligent, self-organizing, living universe makes it radically different from the mechanistic worldview. This assumption underlies and organizes all knowledge derived from the holistic worldview and agrees with ancient conceptions of the world and first-hand phenomenological experiences.

The holistic worldview covers a more comprehensive vision of nature than the mechanistic vision, since it's not only focused in the aspects that can be subjected to measurement. Taking into account the valuable knowledge consequent from the study of quantities, but at the same time conveying the same weight to qualities, the holistic way of perception

successfully creates a more complete and integral way of relating with the world. There are methodologies that express the unification between quantities and qualities, *mythos* and *logos*, showing that the creation of more integral structures of knowledge is possible ³.

Holistic perception is based on the certainty that human beings do not live in a world of their own. Humans *are* nature and share their organic origins with the world with which they intimately participate and are deeply related to, instead of seeking its manipulation and control. The human being "is a being of relations and not just of contacts, he is not alone in the world but with the world ⁴".

The actions of an individual that embodies the holistic mode of perception do not hinder nor negatively influence the natural flows of energy of ecological systems. On the contrary, his customs, structures, economies, technologies and so on, adhere to the intrinsically sustainable flow of nature and its ability to maintain life. In Fritjof Capra's words, that individual is *ecoliterate*. The activities based on the holistic perception are informed by their surroundings and imitate communities of plants, animal, microorganisms, and other beings, that result in sustainable patterns of conduct.

It is of paramount importance to make evident that life in its different expressions presents the same organizational pattern that enables us to self-produce and self-maintain us through time. From the tiniest bacteria to the planet as a whole, the same autopoietic process that provides their identity and is characterized for the presence of consciousness is present. In Humberto Maturana's words: "Living systems are cognitive systems and life as process is a process of cognition. This statement is valid for all organisms, with or without a nervous system ⁵".

The organization of the living is the process of being conscious, and the interactions of the living entity with its environment are cognitive interactions. Therefore, every expression of life shares the same basic organization that allows them to live, characterized by the presence of consciousness and an emotive process of sense-making, of bringing significance and value into existence ⁶. Thus, in the holistic way of perception every expression of life is sentient and presents an inherent value both of which contribute to dissolve the Cartesian division between mind and body, or subject and object.

Many of us would argue that the objectivity with which we gain knowledge is such, that we have managed to explore deep space or to direct a missile with millimetric precision to a specific location at the other side of the planet. Nonetheless, if we take a deeper look we can find that this is not quite the case. It is useful to recognize that each and every theory and scientific model that shape and inform our world, necessarily contain the trademark of the researchers' life experiences in all their sensual,

intuitive, emotional, and rational facets. The researchers' experiences "remain the platform of all their objectivity, for whatever they perceive is entwined with their own subjectivity and the dynamic sentience of the world". The holistic worldview recognizes the indivisibility of subjective and objective experiences, without falling into relativistic or purely empirical extremes. On the contrary, the integration of both types of experiences aims towards a deeper understanding of the knowledge acquired.

The holistic perception recognizes that the properties of interconnection and interdependency are the base of the cosmos' functioning. Given that, this mode of perception is embedded and modulated by the natural flow in which natural phenomena occur and not above them. This returns us to our 'natural place' in the web of life, where we discover ourselves in a new world free of the plague of objectivation, permeated with a feeling of empathy and belonging with the more-than-human world. This is a very important step to take, because by making us aware of our belonging to the web of life, the holistic mode of perception frees us of from the illusory superior position that we previously possessed, from anthropocentrism to ecocentrism. It provides us with the necessary humility to realize that we humans are not more or less important than a frog or a tick, in the same way that a man is not more or less important than a woman. This implies that an '*ecospheric ethics*' comes into play, and the planet and his intricate organic-inorganic self-made tapestry is respected and honored, and not just appreciated because of its beneficial role to humankind.

This respect is also evident in our immediate lives, in the social sphere. The dominant notions of development and progress that reign in our societies dictated by competition, the 'survival of the fittest', and the accumulation of material goods at the cost of the biosphere's health, are left aside. In the holistic way of perception, competition and individualistic values are replaced for cooperation and the full recognition of the unity within diversity, giving way to less egotistical approaches of being in community.

Under the holistic lens, the cosmos is a web of interdependent and cooperative with irreducible properties. The knowledge we gain is formed by qualities and quantities, by objective and subjective experiences that offer us an integral experience of personal transformation. The human being is *in* the world and *with* the world in a reciprocal and participatory relation, while the self-maintaining process of ecoliteracy and the resultant ethics, are fundamental parts of everyday life. These characteristics make of the holistic worldview the natural step to take in order towards the evolution of Western societies. It also provides us with the necessary knowledge to deal with the present challenges to our societies and our environment, so we can recreate the role and identity for the people of the twentiethfirst century.

MECHANICISM AS THE ENTRY DOOR

How then to achieve the change? How to give the first steps in the right direction? The answer can be simpler than we might think. As we could appreciate, there are radical differences between the mechanistic and holistic modes of perception. Even so, these forms of perception do not stop from being precisely that, perceptual alternatives that human beings have at their reach to infuse purpose and meaning to the world. Most probably, another alternative will soon emerge that will encompass even more aspects of reality than the holistic mode. In the meantime, it is wise to begin to embrace the holistic mode of perception via the mechanistic one.

The mechanistic worldview is contained in the holistic worldview; it is just an aspect of it, a limited version of the multi-dimensionality of reality. By taking this into serious consideration, it is possible to use this narrower vision of the cosmos to gain entrance to the more encompassing version of the holistic perception. In fact, some mechanistic practices and methodologies can be very useful to enter into the 'holistic world,' offering purpose and rigor to the new experience.

The journey from the mechanistic to the holistic worldview is a process of change, the transformation of our collective and personal realities in which we gain what we have lost: our connection with the more-than-human world and the cosmos at large. This reconnection projects us to a reality filled with creativity, ethics, empathy, and harmony that expand the boundaries of reality to mysterious kingdoms that present us with new ways of making science and living our lives. This great perceptual leap literally transforms our world and creates new ways to relate with reality and our daily life. The results of our reconnection with our cosmic relatives would soon be evident in our shared reality and would return the amusement and honor of living that would be faithfully reflected in our interior.

REFERENCES

- 1 Swimme, B. and Berry, T. (1992), *The Universe Story: From The Primordial Flaring Forth to the Ecozoic Era*. San Francisco: Harper.
- 2 Aizenstat, S. (1995), "Jungian psychology and the world unconscious," in T. Rozsak, M. Gomes, M. and D. Kanner (eds.), *Ecopsychology: Restoring the Earth, Healing the Mind*. San Francisco: Sierra Club Books, pp. 92-100.
- 3 Bortoft, H. (1996), *The Wholeness of Nature: Goethe's Way Toward a Science of Conscious Participation in Nature*. NY: Lindisfarne Books. Also Goodwin, B. (2001), *How the Leopard Changed its Spots: The Evolution of Complexity*. Princeton: Princeton University Press.
- 4 Freire, P. (1969), *La educación como práctica de la libertad*. México: Siglo XXI-Tierra Nueva.
- 5 Maturana, H. (1970), "Biology of cognition," in *Autopoiesis and Cognition: The Realization of the Living*. Maturana, H. y Varela, F. (1980), NY: Riedel Publishing Company.
- 6 Thompson, E. (2004), "Life and mind: From autopoiesis to neurophenomenology. A tribute to Francisco Varela," *Phenomenology and the Cognitive Sciences* 3: 381-398
- 7 Abram, D. (1996), *The Spell of the Sensuous: Perception and Language in a More Than-Human World*. NY: Vintage Books.